

correa

NORMA

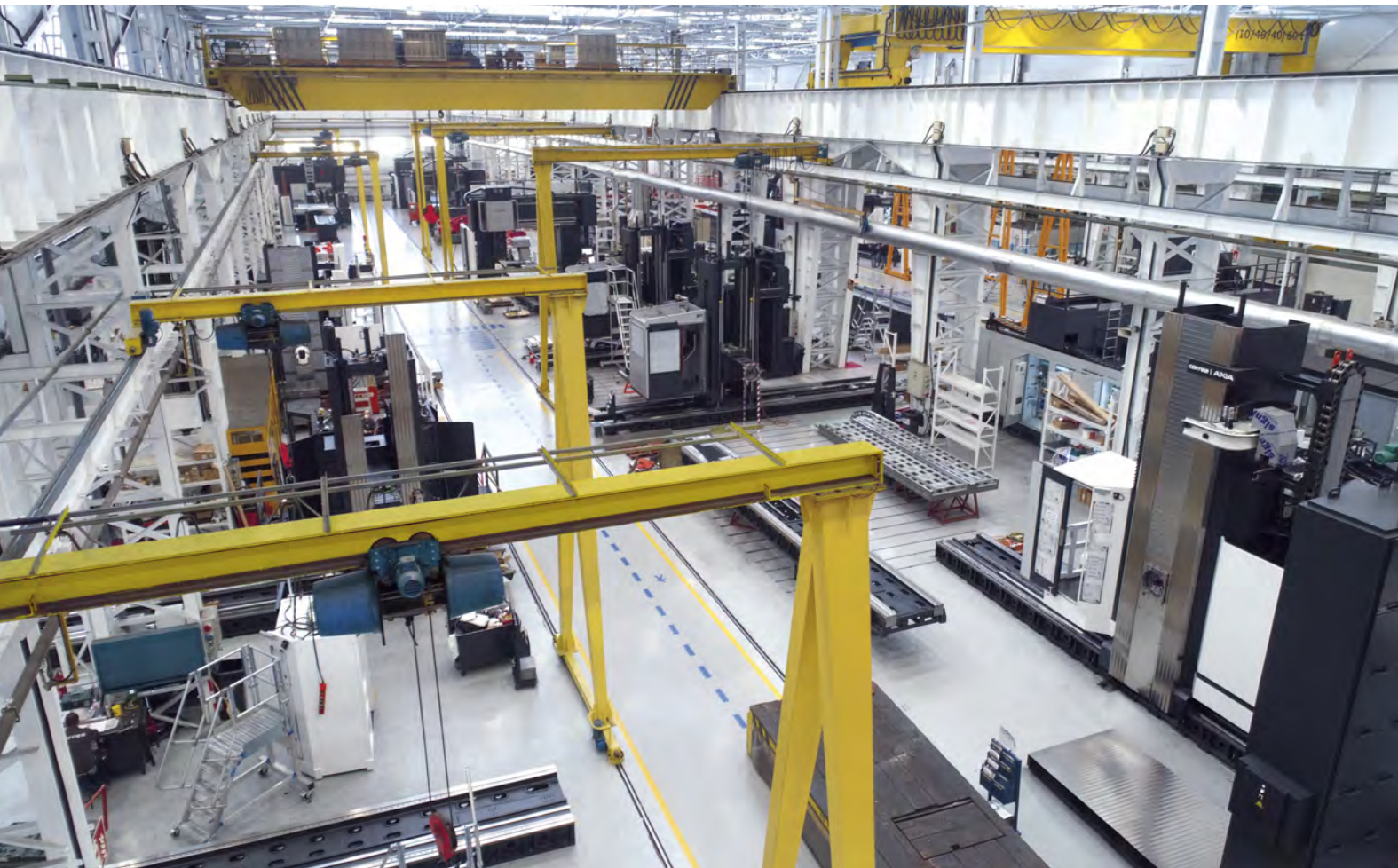
Bed type milling machine

WARRANTY



Nicolás Correa, founded in Spain in 1947, is one of world's leading companies in the manufacturing of large milling machines. With over 900 bridge type machines, 1000 floor type machines and 3500 bed type machines installed all over the world, offers milling solutions designed for the most demanding production environments, such as the power generation, automotive, aerospace and railway industries.

Nicolás Correa is the parent company of **Correa Group** composed of four industrial subsidiaries linked to the machine tool sector: Hypatia, Steelworks, Electrónica and Kunming. The Group has commercial subsidiaries in China, Germany, United States, and India with the aim to offer the best service in all countries. Belonging to the group provides **Nicolás Correa** with access to top quality critical supplies and offers tailored solutions especially designed for each customer's needs.

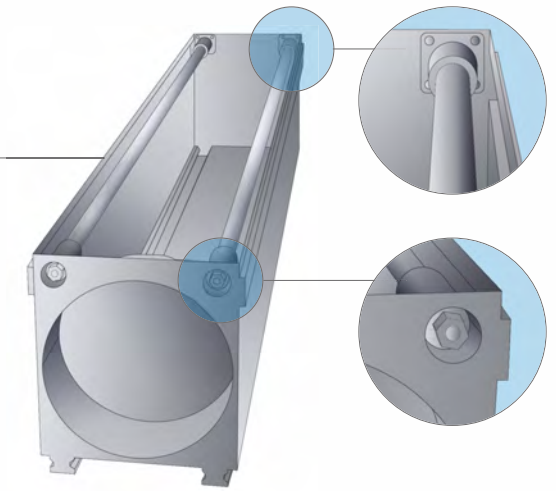


Thousands of customers around the world place their trust in **correa** range of milling machines. **Correa Group** currently exports around 90% of its production to over 30 different countries. To guarantee a high-quality service to our customers, we have an extensive international commercial and technical service network in most of the world's countries. **Correa Group** offers the widest range of milling solutions on the market, including bed type machines, gantry, floor type machines, bridge type machines, it also has a several options of multi-tasking machines. The entire range is designed and manufactured in Spain. **Nicolás Correa, S.A.** has been listed on the Madrid Stock Exchange since 1989.

The **NORMA** represents a new concept in fixed frame, lateral ram machine. Very sturdy thanks to structural elements with large sections together with an L-shaped ram guide system. A high precision thanks to the mechanical ram droop correction system. A flexible machine suitable for machining and finishing operations.

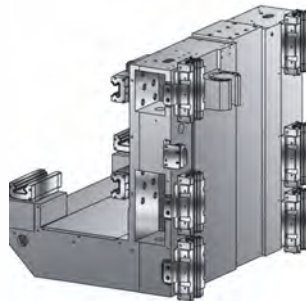
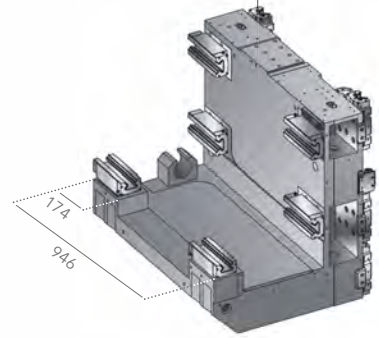


Traction bars to eliminate the angular error of the ram droop effect

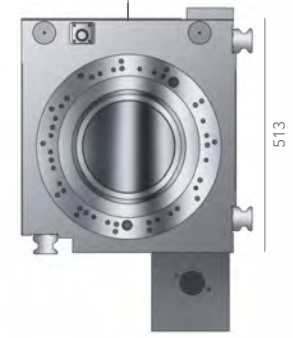
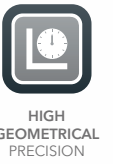


L GUIDE-WAY SYSTEM CONFIGURATION

- L-shaped guide system:
 - Greater rigidity and stability during machining.
 - Greater geometrical precision.
 - Less ram droop effect.
- 6 vertical movement sliders ensuring good machine behaviour.



The largest cross-sections on the market. High machining capacity + geometrical stability over time.



MORE ABOUT THE NORMA



Dynamic performance parametrizable in accordance with:

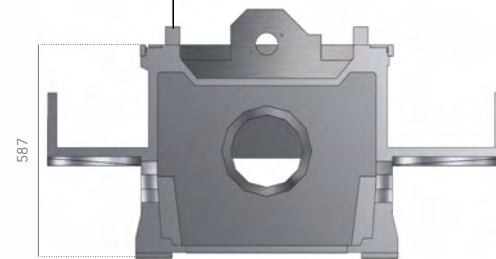
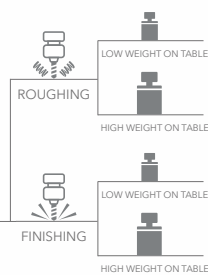
- ROUGHING OPERATION
- FINISHING OPERATION



MACHINE DYNAMIC ADJUSTMENT



MACHINING SETTINGS



MULTITASKING

Several machining operations on one single machine



HIGH FEED RATES

30 m/min in X, Y and Z axes, thanks to its V-Shaped linear guide-ways in all axes



ECO DESIGN

Stand-by function and Auto Switch off function, saving 20% of the total energy machine consumption

Technical Features

NORMA 20

NORMA 25

NORMA 35

NORMA 45

TABLE

Table width	1000 / 1250				mm
Maximum load on the table	4.5	6.5	8.5	10.5	t

INTEGRATED ROTARY TABLE [OPTIONAL]

Diameter	MILLING: 1000 / 1200		TURNING: 1100 / 1250		mm
Maximum load	MILLING: 7		TURNING: 3		t

TRAVERSES

Longitudinal [X]	2000	2500	3500	4500	mm
Cross [Y]	1250 / 1500				mm
Vertical [Z]	1500 / 2000				mm

FEEDS

Maximum [X]	30	m/min
Maximum [Y]	30	m/min
Maximum [Z]	30	m/min

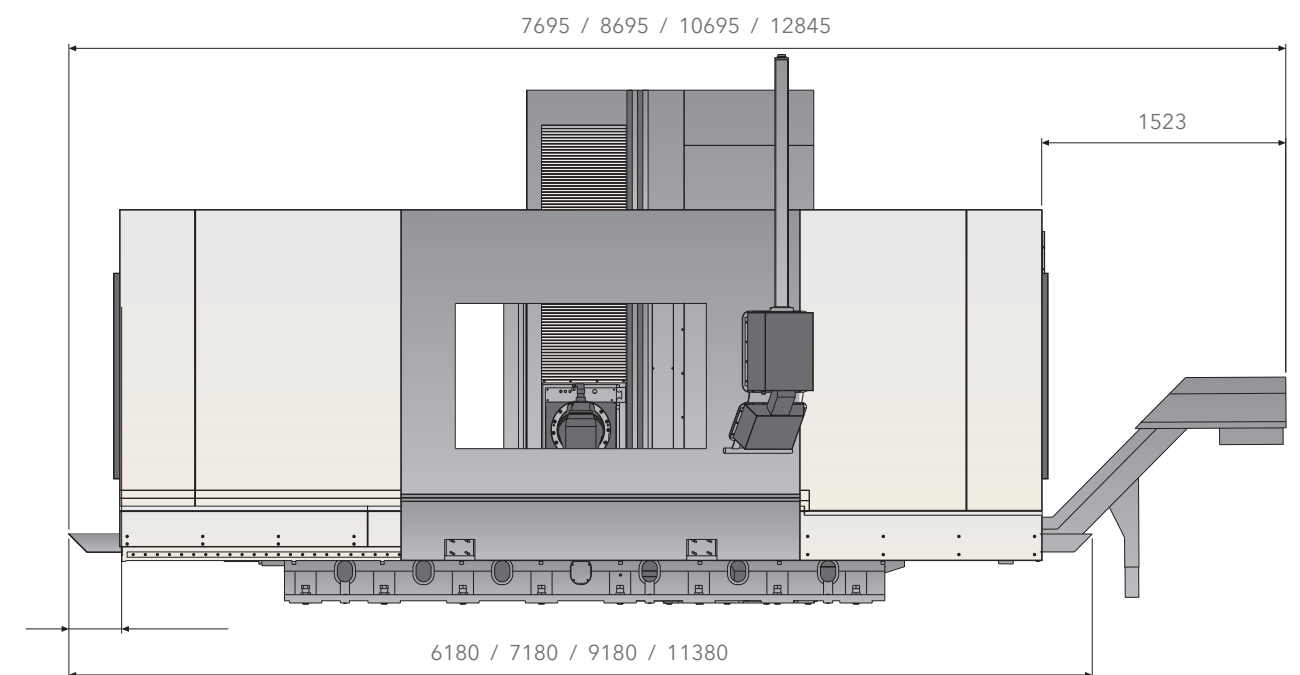
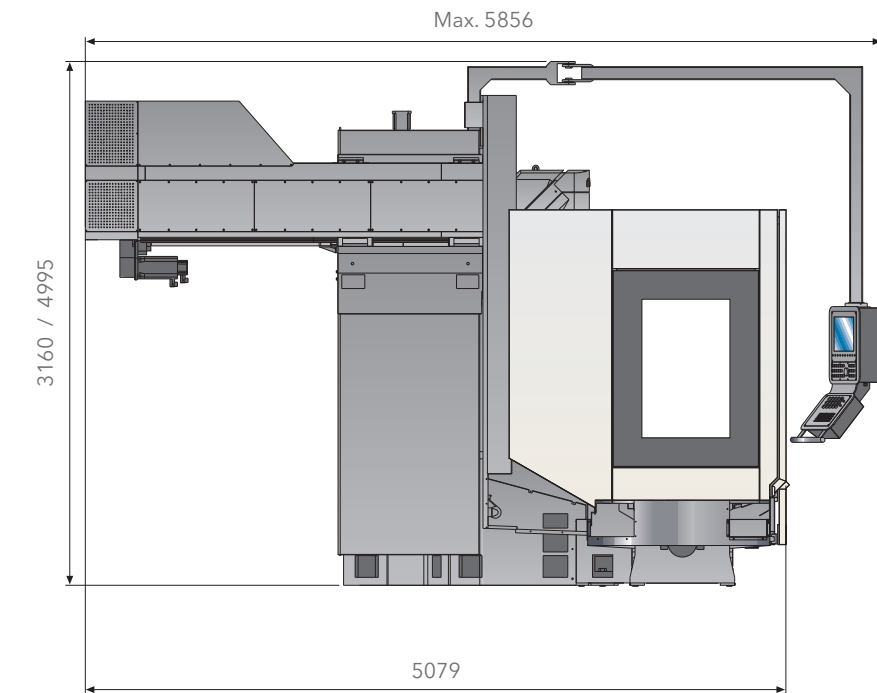
SPINDLE SPECIFICATIONS

Spindle nose	ISO-50 Big Plus / HSK-100				
Programmable speed	4000 / 6000 / 10000				rpm
Maximum power	24 / 33 / 30				kW
Maximum torque	840 / 990 / 620				Nm

WEIGHT

Machine weight	17.8	19	21.2	24	t
----------------	------	----	------	----	---

External Dimensions



NORMA

Bed type milling machine



Milling Heads

UAD • UAD T 0.02° x 0.02°



Universal Auto-Indexing
Differential Head
24 kW | 840 Nm | 6000 rpm
33 kW | 990 Nm | 6000 rpm



UDX 0.02° x 0.02°

Universal Auto-Indexing Head
30 kW | 620 Nm | 10000 rpm



OAD 0.02° x 0.02°

Orthogonal Auto-Indexing
Differential Head
24 kW | 840 Nm | 6000 rpm
33 kW | 990 Nm | 6000 rpm

UDG 2.5° x 2.5°



Universal Automatic Head
24 kW | 840 Nm | 4000 rpm
33 kW | 990 Nm | 4000 rpm

Standard Equipment

- Automatic Universal Head • Gearbox
- Numerical control Heidenhain TNC 640 • Hydraulic group
- Portable handwheel • Linear scales in all axes
- Air-conditioned electrical cabinet • External Coolant with adjustable nozzles in the head
- Linear guides in the X, Y and Z axes • Perimeter fence
- Lamp in the working area • Direct Tele-service

Optional Equipment

- Other heads • Vixion 4.0
- Pick up station for 8 tools • Centrifugal filter in cutting fluid tank
- Automatic charger for 30, 40 and 60 tools • Air or oil cleaning gun with motor pump
- Probes of measurement, tools and parts • Coolant through spindle to high and medium pressure
- Rotary tables • Chip conveyors
- Basic guarding • Integral guarding



MULTITASKING

correa multitasking machines combine several cutting processes on one machine. These machines offer the manufacturing capabilities of milling and turning machines into one integrated unit to use the functionality of both simultaneously.

UAD T



The universal head **UAD T** incorporates a spindle internal brake to lock the spindle axis. This solution allows to rotate the turning tool to any position and lock the spindle accordingly. This is a mechanical transmission head providing a perfect integration between milling and turning.

General Specifications

Taper: HSK-100 for both milling and turning tools. In case of turning tools HSK-100T is required.

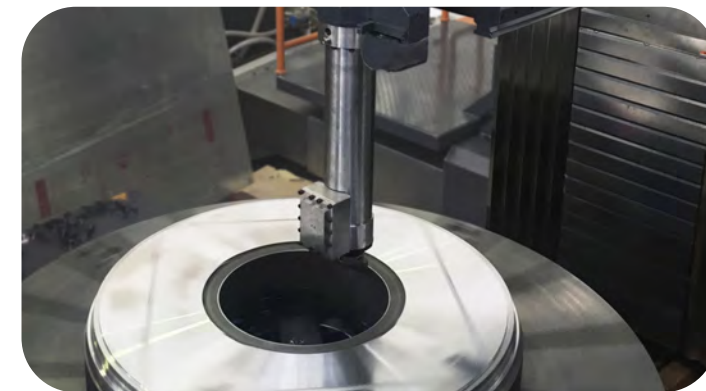
Milling mode: 6000 rpm and rotation every 0.02° in both bodies.

Turning mode: Rotation every 0.02° in both bodies.

	Material	Ø (mm)	Ap (mm)	Vc (m/min)	F (mm/min)	Q (cm³/min)
Medium Duty Roughing	Ck-45 (60 kg/mm²)	1090	4.5	210	0.5	471

TUB

For internal turning operations in deep parts, Nicolás Correa has specifically designed a manual extension which includes a tuned mass absorber (TMA) internally for a better cutting performance.



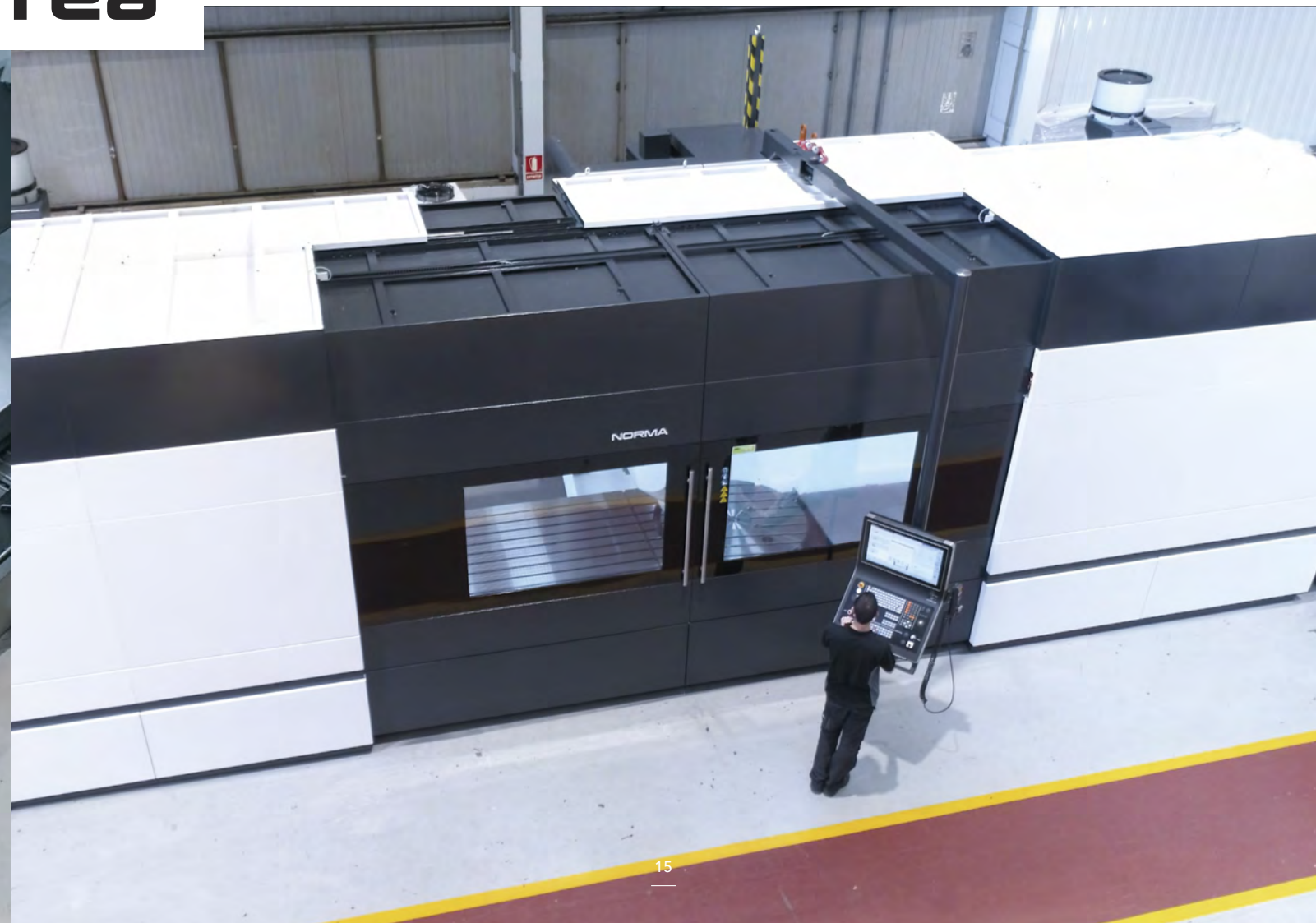
TURNING ROTARY TABLE

	Ø 1100 mm	Ø 1250 mm	
Maximum load	3	3	t
Speed	250	250	rpm





correa



correa

www.nicolascorrea.com

GNC Hypatia

Condado de Treviño, 53
09001 Burgos • Spain
Phone: +34 947 298 528
Fax: +34 947 473 520
info@gnchypatia.com

Nicolás Correa, S.A.

Alcalde Martín Cobos, 16-A
09007 Burgos • Spain
Phone: +34 947 288 100
Fax: +34 947 288 117
correa@correa.es

